



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,425	02/22/2002	Troy Curtiss	UTL 00179	8289

7590 06/02/2005

Kyocera Wireless Corp.  
Attn: Patent Department  
PO Box 928289  
San Diego, CA 92192-8289

EXAMINER
----------

PHU, SANH D

ART UNIT	PAPER NUMBER
----------	--------------

2682

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/080,425		CURTISS ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Sanh D. Phu		2682	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

DETAILED ACTION

*Claim Rejections – 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1–28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hutchison et al (6,725,061) (previously cited), in view of Chang et al (6,330,247) (previously cited).

Regarding to claim 1, Hutchison et al disclose that an accessory (201) and a wireless communication device (101) configured to detect the type of accessory connected to the wireless communication device comprising:

an accessory (201) comprising:

two (212, 214) or more outputs configured to connected to the wireless communication device (see Fig. 1 and 2, col. 2, lines 62–67);

a signal source (212)(microphone) configured to connect to at least one of the two or more outputs, the two or more outputs arranged to generate a line voltage pattern (voltage level)(see Fig. 2, col. 5, line 29 to col. 6, line 29); and;

an wireless communication device (101) comprising:

two (202, 210) or more inputs configured to receive the line voltage pattern or more signals from the accessory (201) (see Fig. 2);

a processor configured (112) to:

analyze the line voltage pattern to determine a type of accessory connected to the wireless communication device (see Fig. 4); and

initiate accessory interaction based on the analysis (see Fig. 5, col. 7, line 14 to col. 10, line 9) .

Hutchison et al does not disclose whether said accessory comprises a memory of storing a control data and said processor uses the control data to operate the accessory.

In the same endeavor, Chang et al teaches storing control data (e.g., Software Version Number (SVN), VR mode, Generic Mode, Extended Software

Art Unit: 2682

Version Number, CarKit status, etc.) in means (116) of an accessory (102) for transferring said control data to a processor (106) of a wireless communication device (100) to use said control data to operate the accessory (see figure 1, and col. 5, line 15 to col. 8, line 64).

It would have been obvious for a person skilled in the art, when building or carrying out Hutchison et al invention, to implement the accessory (201) to include a storing means of storing control data for transferring said control data to the processor (112) of the wireless communication device (101) to use said control data to operate the accessory, as taught by Chang et al so that the wireless communication device would be enhanced in gaining the consistency with the accessory during controlling to operate the accessory.

Regarding to claim 2, Hutchison et al disclose that the accessory and wireless communication device wherein the accessory further includes memory and wherein the processor is further configured to read data from the memory in the accessory (see col. 6, lines 22–23, an external accessory has a memory to store an ID code).

Regarding to claim 3, Hutchison et al disclose that the accessory and wireless communication device wherein the accessory comprises a hands-free system (202,210) (see Fig. 2).

Regarding to claim 4, Hutchison et al disclose that the accessory and wireless communication device wherein the line voltage pattern comprises DC voltage levels (voltage level) (see col. 5, lines 29-31).

Regarding to claim 5, Hutchison et al disclose that the accessory and wireless communication device wherein the DC voltage levels comprise logic `1` values and logic `0` values (see col. 5, lines 29-55).

Regarding to claim 6, Hutchison et al disclose that the accessory and wireless communication device wherein accessory interaction comprises executing software code to interface with the accessory (see Fig. 5, col. 7, line 16 to col. 10, line 9).

Regarding to claim 7, Hutchison et al disclose that the accessory and wireless communication device wherein the wireless communication device comprises a cellular telephone (see col. 2, line 55).

Regarding to claim 8, the Hutchison et al disclose that accessory and wireless communication device wherein the accessory further includes a memory configured to store a control code, the memory accessible via the two or more outputs (see col. 6, lines 22–23, an external accessory has a memory to store an ID code).

Regarding to claim 9, see Fig. 1, 2, 3, 4 and 5, col. 2, line 62 to col. 6, line 29, Hutchison et al disclose that an accessory (201) for use with a communication device (101) comprising:

two (202, 210) or more output terminals configured to connect to the communication device (see Fig. 1 and 2);

a power source connection configured to connect to a power source (see col. 5, lines 29–55);

a signal generator configured to obtain power from the power source connection and provide a signal on at least one of the two or more output terminals, the two or more outputs arranged to generate a line voltage pattern and wherein the accessory is identified by the line voltage pattern (voltage level)(see col. 5, lines 29 to col. 6, line 29).

Hutchison et al does not disclose whether said accessory comprises a memory of storing a control data wherein the control data is transferable to the communication device.

In the same endeavor, Chang et al teaches storing control data (e.g., Software Version Number (SVN), VR mode, Generic Mode, Extended Software Version Number, Carkit status, etc.) in means (116) of an accessory (102) for transferring said control data to a processor (106) of a wireless communication device (100) to use said control data to operate the accessory (see figure 1, and col. 5, line 15 to col. 8, line 64).

It would have been obvious for a person skilled in the art, when building or carrying out Hutchison et al invention, to implement the accessory (201) to include a storing means of storing control data for transferring said control data to the processor (112)) of the communication device (101) to use said control data to operate the accessory, as taught by Chang et al so that the communication device would be enhanced in gaining the consistency with the accessory during controlling to operate the accessory.



Regarding to claim 10, Hutchison et al discloses that the accessory wherein the power source connection is configured to connect to a 12-volt power supply (external power is 12 V car battery).

Regarding to claim 11, Hutchison et al disclose that the accessory wherein the signal generator is a semiconductor device configured to generate a DC signal ("high logic" or "low logic" level, see col. 5, lines 29–55).

Regarding to claim 12, Hutchison et al disclose that the accessory further including a memory configured to store a control code, the memory accessible via the two or more output terminals (see col. 6, lines 22–23, an external accessory has a memory to store an ID code).

Regarding to claim 13, Hutchison et al disclose that a method for detecting a category of an accessory (201) connected to a communication device (101):

providing a communication device with two (212, 214) or more inputs;  
monitoring the two or more inputs for a line voltage pattern (see col. 5, lines 29–55);

comparing the line voltage pattern (High logic or Low logic) to a predetermined patterns (see col. 5, lines 29–55); and

determining, responsive to the comparing, the category of the accessory connected to a communication device (see col. 5, lines 29–55).

Hutchison et al does not disclose whether said accessory comprises a memory of storing a control data wherein the control data is transferable to the communication device.

In the same endeavor, Chang et al teaches storing control data (e.g., Software Version Number (SVN), VR mode, Generic Mode, Extended Software Version Number, CarKit status, etc.) in means (116) of an accessory (102) for transferring said control data to a processor (106) of a wireless communication device (100) to use said control data to operate the accessory (see figure 1, and col. 5, line 15 to col. 8, line 64).

It would have been obvious for a person skilled in the art, when building or carrying out Hutchison et al invention, to implement the accessory (201) to include a storing means of storing control data for transferring said control data to the processor (112) of the communication device (101) to use said

control data to operate the accessory, as taught by Chang et al so that the communication device would be enhanced in gaining the consistency with the accessory during controlling to operate the accessory.

Regarding to claim 14, Hutchison et al disclose that the method further includes reading ID code data from a memory located in the accessory and analyzing the data (see Fig. 3, col. 6, lines 16–29).

Regarding to claim 15, Hutchison et al disclose that the method further including providing an accessory with two or more outputs and connecting two or more outputs of the accessory to the two or more inputs of the communication device (see Fig. 2).

Regarding to claim 16, Hutchison et al disclose that the method wherein the data comprises control data and the method further includes reading at least a portion of the control data from the memory in the accessory (see col. 6, lines 22–23, an external accessory has a memory to store an ID code).

Regarding to claim 17, Hutchison et al disclose that the method wherein one of the predetermined patterns comprise at least one input receiving a voltage and the remaining inputs receiving no voltage (see Fig. 3).

Regarding to claim 18, Hutchison et al disclose that the method wherein the accessory comprises a speakerphone system (210) and the communication device (101) comprises a wireless telephone (see Fig. 2).

Regarding to claim 19, Hutchison et al disclose that the method further comprising reading accessory data stored in a memory on the accessory and initiating an accessory interaction operation based on the comparing (see Fig. 3, col. 6, lines 15–29).

Regarding to claim 20, Hutchison et al disclose that the method wherein the accessory interaction comprises setting audio parameters (see Fig. 2, setting 214).

Regarding to claim 21, Hutchison et al disclose that the method wherein the accessory interaction comprises executing software code (see Fig. 5).

Regarding to claim 22, Hutchison et al disclose that a method for initiating operation of an interface of a communication device (101) with an accessory (201) (see figures 1 and 2) comprising:

monitoring two or more inputs for a line voltage pattern (voltage level) receiving from the accessory (see col. 5, lines 5–37);

detecting a line voltage pattern on the two or more of the inputs (see col. 5, lines 5–19);

processing the line voltage pattern to determine a type of the accessory connected to the communication device (see Fig. 3); and

initiating an accessory interaction operation based on the processing (see Fig. 3, 4, 5).

Hutchison et al does not disclose steps of analyzing the line voltage pattern to determine if the communication device has control data for operating the accessory; and receiving, responsive to the analyzing, new control data and using the new control data.

In the same endeavor, Chang et al teaches an operation of an interface of a communication device (100) with an accessory (102) wherein the communication device comprises a microprocessor (106) of analyzing the signal(s) (Carkit Status) received from the accessory to determine if the communication device has control data (e.g., handset status, audio path setup, stereo mute/un-mute status, power status, etc.), matched with the signal(s), for operating the accessory; and receiving, responsive to the analyzing, new

Art Unit: 2682

control data using the new control data if the current control data is not matched with the signal(s) received from the accessory (see figure 1, and col. 5, lines 50-64).

It would have been obvious for a person skilled in the art, when building or carrying out Hutchison et al invention, to implement the communication device comprises a microprocessor of analyzing the signal(s) (Carkit Status) received from the accessory to determine if the communication device has control data (e.g., handset status, audio path setup, stereo mute/un-mute status, power status, etc.), matched with the signal(s), for operating the accessory; and receiving, responsive to the analyzing, new control data using the new control data if the current control data is not matched with the signal(s) received from the accessory, as taught by Chang et al, so that the communication device would be enhanced in gaining the consistency with the accessory during controlling to operate the accessory.

Regarding to claim 23, Hutchison et al disclose that the method wherein the signal comprises a DC signal (High logic or Low logic level).

Art Unit: 2682

Regarding to claim 24, Hutchison et al disclose that the method wherein processing comprise comparing the signal to data stored in memory see col. 6, lines 15–29).

Regarding to claim 25, Hutchison et al disclose that the method wherein processing comprises providing a signal to control logic, the control logic configured to determine an accessory type (see Fig. 3, 4, 5).

Regarding to claim 26, Hutchison et al disclose that an apparatus (101) for detecting a type of accessory (201) connected to a communication device (101), the apparatus (see figures 1 and 2) comprising:

Means (136) for coupling to an accessory (201) using at least two signal lines (the line obviously has a signal line and a ground line) (see Fig. 2 and 3) ;

means for receiving a line voltage pattern from the accessory (col. 5, lines 5–7 and 15–19) ;

means for detecting the line voltage pattern from the accessory (see col. 15–19;

means for analyzing the line voltage pattern from the accessory and controlling communication device operation based on the analyzing (see fig. 3,4 , 5, col. 5, line 5 to col. 6, line 29).

Hutchison et al does not disclose whether the apparatus comprises means for receiving control data from the accessory the communication device.

In the same endeavor, Chang et al teaches storing control data (e.g., Software Version Number (SVN), VR mode, Generic Mode, Extended Software Version Number, Carkit status, etc.) in means (116) of an accessory (102) for transferring said control data to a processor (106) of a wireless communication device (100) to use said control data to operate the accessory (see figure 1, and col. 5, line 15 to col. 8, line 64).

It would have been obvious for a person skilled in the art, when building or carrying out Hutchison et al invention, to implement the accessory (201) to include a storing means of storing control data for transferring said control data to the processor (112) of the communication device/apparatus (101) to use said control data to operate the accessory, as taught by Chang et al so that



Art Unit: 2682

the communication device would be enhanced in gaining the consistency with the accessory during controlling to operate the accessory.

Regarding to claim 27, Hutchison et al disclose that the apparatus further includes means for retrieving data from the accessory (see col. 6, lines 22-23, read ID data from the accessory).

Regarding to claim 28, Hutchison et al disclose that the apparatus wherein the means for analyzing the line voltage pattern comprises means for determining which of the signal lines is receiving an electrical signal (DC signals are inherently electrical signals).

### ***Response to Arguments***

3. Applicant's arguments filed on 4/29/05 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D Phu whose telephone number is (703) 305-8635. The examiner can normally be reached on 8:00-16:30.

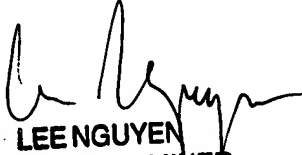
Art Unit: 2682

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-8635.

Sanh D. Phu  
Examiner  
Art Unit 2682

SP

  
LEE NGUYEN  
PRIMARY EXAMINER